

TRAFFIC CONTROL PLAN AND SPECIFICATIONS PURSUANT TO B6.33 SAFETY

Unless otherwise agreed, the following measures are required to provide adequate warning of hazards for users of roads and trails adjacent to Purchaser's Operations.

Part I. Signing and Other Warning Methods:

(a) Signs. The following signs are required when Purchaser's Operations are in progress adjacent to or on Forest Service controlled roads and trails:

<u>MINIMUM LETTER SIZE AND LEGEND</u>	<u>MINIMUM SIZE AND SHAPE</u>	<u>WHEN AND WHERE REQUIRED</u>
1. LOGGING OPERATIONS NEXT ____ MILES (4" letters)	24" (rectangle) 36"	Min. 100 ft. outside of any continuous work areas, on roads listed in C5.31# and trails listed in Part II.
2. LOGGING OPERATIONS (3" letters)	24" (diamond) 24"	To be used in conjunction with "Logging Operations Next ____ Miles" and where work area is not continuous.
3. FOR LOGGING USE ONLY (3" letters)	24" (diamond) 24"	Required where roads listed in C5.31# and temporary roads intersect with C5.31# roads. Install a cross ditch to discourage use when sign is covered or removed for extended periods.
4. TRUCKS (4" letters)	24" (diamond) 24"	At critical intersections on roads listed in C5.31# when traffic is heavy or otherwise exceeds volumes stated in Part II below. Remove or cover when the sign is not applicable.
5. END LOGGING OPERATIONS (4" letters)	24" (rectangle) 36"	Use in conjunction with "Logging Operations Next ____ Miles" and "Logging Operations."
6. TREE FELLING AHEAD (3" letters)	24" (diamond) 24"	Required 200 feet in advance of danger area where timber is being felled adjacent to all roads, including temporary roads, and trails.
7. ROAD MACHINERY AHEAD (3" letters)	24" (diamond) 24"	Required at least 200 feet in advance of Purchaser road maintenance operations on roads listed in Schedule C5.31#.

TRAFFIC CONTROL PLAN AND SPECIFICATIONS - B6.33 Safety (continued)

All signs shall meet requirements as specified in Parts I and VI of the Manual of Uniform Traffic Control Devices (MUTCD).

Sign borders and lettering shall be black. Borders are 1/2 inch wide, inset 1/2 inch from outside edge of sign. All sign backgrounds shall be orange, except signs #1 and 5 which shall be reflectorized orange.

Signs shall be installed on posts, with a 5 foot minimum ground clearance, or on temporary supports complying with MUTCD standards.

All signs are to be removed or covered when operations are interrupted for seasonal nonuse or other extended periods.

Purchaser shall furnish flag personnel and advance warning signs when cable or helicopter logging above roads or trails, felling adjacent to roads or trails, where logs being bucked may roll into roads or trails, and in areas where fallout from blasting may occur. On roads listed in C5.31# and temporary roads, Purchaser may temporarily block the road in lieu of furnishing flag personnel.

(b) Barricades. On roads listed in C5.31#, if Purchaser's Operations cause the traveled way or road shoulders to be constricted overnight, or longer, by such obstructions as decked logs, parked equipment, or piled slash, Purchaser shall place barricades on both sides of the encroaching obstruction to safely channel traffic around such obstructions. Barricades shall remain in place until the obstruction is removed.

Barricades shall be Type II and meet specifications in MUTCD, Part VI. Barricades must be at least 3 feet high. Rails must be at least 2 feet long. Striping shall be alternating orange and white, sloping at a 45 degree angle, and reflectorized. For rails 2 feet to 3 feet long, striping shall be 4 inches wide. For rails longer than 3 feet, striping shall be 6 inches wide. Two rails, 8-12 inches in width, must face each direction.

Barricades shall be equipped with warning lights which shall be Type A low intensity flashing and shall be maintained so as to be capable of being visible on a clear night from a distance of 3,000 feet.

(c) Other Traffic Control Methods. The posting of CB channel signs may be authorized.

On roads listed in C5.31#, Purchaser may be authorized to install temporary gates, barricades (except cables), or natural barriers. The devices must be installed with the necessary hazard markers, be reasonably passable by Forest Service, and be removed prior to acceptance of the subdivision being served by the road.

TRAFFIC CONTROL PLAN AND SPECIFICATIONS - B6.33 SAFETY (continued)

Part II. Specific Requirements:

There are no additional specifications.

Purchaser and Forest Service agree to the above stated requirements of the Traffic Control Plan:

Name

Name

Title

Title

Date

Date

DESCRIPTION PURSUANT TO C2.35# (OPTION 1) - INDIVIDUAL TREE DESIGNATION
(06/2008)

Designation Table

SUBDIVISION	INDIVIDUAL TREE DESIGNATION
1, 3*, 7*, 8*	DxD
2	DL 16.3" DBH ^{2/}
4*	DL 15.8" DBH ^{2/}
5	DL 15.9" DBH ^{2/}
6	DL 15.3" DBH ^{2/}

*Subdivisions 3, 4, 7 and 8 include half acre gaps. These gaps will be created by falling all live Douglas-fir meeting minimum specifications in A2 within 83 feet from the designated gap leave tree. Gap leave trees are marked with a band of orange tracer paint at breast height and a mark below stump height. (See sale area map for locations.)

Diameter Limit (DL):

Cut all live Douglas-fir, meeting minimum specifications in A2, up to and including the Diameter Limit in the subdivision.

Designation by Description (DxD): **(Applies outside of designated gaps),**

Cut all live Douglas-fir meeting minimum specifications within **20 feet^{1/}** of the described leave treesS below:

Trees to be left by Priority of Implementation: *(Boundary trees will not be used to designate cut trees.)*

#1 . Any western hemlock 12 inch DBH^{2/} or greater. (If not present see #2.)

#2. The Douglas-fir with the largest DBH^{2/}.

^{1/} Distances are measured in slope distance, tree face to tree face at breast height (4.5 feet). The face of the tree is defined as the portion of the bole that is closest to the bole of the tree being measured from.

^{2/} Breast height diameter is measured at 4.5 feet on the high or uphill side of the tree at a right angle to the lean of the tree. The diameter of trees with swellings, branches or abnormalities at 4.5 feet will be taken above 4.5 feet at the point where diameter is no longer affected by the condition.

Forest Service shall approve included timber prior to yarding.

All skyline corridors, skid trails, Temporary Roads, and landing clearing limits shall be identified and approved pursuant to C6.42# before this provision is implemented.

REMOVAL SCHEDULE PURSUANT TO C3.47# - ABNORMAL DELAY (09/2004)

<u>Included Timber</u>	<u>Time Limits</u>
ALL.	60 days after felling is started.
All timber decked during construction clearing.	60 days after felling on each Specified Road constructed by Purchaser is initiated.
Timber decked during road construction.	60 days after Forest Service authorizes Purchaser to use roads pursuant to B5.2.

TABLE A PURSUANT TO C5.12# - USE OF ROADS BY PURCHASER (06/1999)

Restricted Road List

Road Number	Road Name	Termini		Map Legend	Description of Restrictions
		From	To		
All Roads listed in C5.31# and all Temporary Roads.				R	Road use for vehicles over 26,000 pounds GVWR shall be suspended when rainfall exceeds 1.0 inch in 24 hours. This suspension shall be for 24 hours after the 1.0-inch rain event. Purchaser shall monitor rainfall accumulation from a Remote Automated Weather Station (RAWS) location to be agreed upon at the Pre-work Meeting.
3420		0 KM	10.14 KM	U	Unsuitable for hauling prior to completion of agreed reconstruction.

Title and Date of Governing Road Rules Document:**Siuslaw National Forest Road Rule**

(Commercial Road Rules)

January 1998

(Effective Date)

TABLE PURSUANT TO C5.31# - ROAD MAINTENANCE REQUIREMENTS (07/2001)

Contract Road Maintenance Requirements Summary

Road	Termini		Miles		Applicable Prehaul Road Maintenance Specifications											
	From	To		T-811	T-813	T-815	T-831	T-832	T-833	T-834	T-835	T-836	T-839	T-842	T-851	T-854
3420	Hwy 34	MP 0.20	0.20		D	P	P	P		P		P		P	P	P
3420	MP 0.20	MP 6.30	6.10	P	P	P	P	P		P		P		P	P	P
3420-111	3420	MP 1.00	1.00	P	P		P	P		P	P		P	P	P	P
3420-114	3420	MP 0.20	0.20	P	P		P	P	P	P	P		P	P	P	P
3420-126	3420	MP 0.15	0.15	P	P		P	P		P	P		P	P	P	P

P = Purchaser Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

Road	Termini		Miles		Applicable During haul Road Maintenance Specifications											
	From	To		T-811	T-813	T-815	T-831	T-832	T-833	T-834	T-835	T-836	T-839	T-842	T-851	T-854
3420	Hwy 34	MP 0.20	0.20		D	P	P	P		P		P		P	P	P
3420	MP 0.20	MP 6.30	6.10	P	P	P	P	P		P		P		P	P	P
3420-111	3420	MP 1.00	1.00	P	P		P	P		P	P		P	P	P	P
3420-114	3420	MP 0.20	0.20	P	P		P	P	P	P	P		P	P	P	P
3420-126	3420	MP 0.15	0.15	P	P		P	P		P	P		P	P	P	P

P = Purchaser Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

Road	Termini		Miles		Applicable Prehaul Road Maintenance Specifications											
	From	To			T-811	T-813	T-815	T-831	T-832	T-833	T-834	T-835	T-836	T-839	T-842	T-851
3420	Hwy 34	MP 0.20	0.20		D	P	P	P		P		P		P	P	P
3420	MP 0.20	MP 6.30	6.10	P	P	P	P	P		P		P		P	P	P
3420-111	3420	MP 1.00	1.00	P	P		P	P		P	P		P	P	P	P
3420-114	3420	MP 0.20	0.20	P	P		P	P	P	P	P		P	P	P	P
3420-126	3420	MP 0.15	0.15	P	P		P	P		P	P		P	P	P	P

P = Purchaser Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

Description of work required by the above listed T-specs is shown in the following ROAD MAINTENANCE REQUIREMENTS SPECIFICATION table, and included in the timber sale contract.

ROAD MAINTENANCE REQUIREMENTS SPECIFICATION TABLE PURSUANT TO
C5.31# - ROAD MAINTENANCE REQUIREMENTS (7/01)

1	2	3			4	5	6			7	8	9	
Road No. and Termini	Special Project Specifi- cation	Travel Way			Brushing And Log Out	Surfacing 1/ 2	Dust Abatement			Seasonal Mainte- nance	Snow Removal	Post Haul	
		Width	X Slope	Comp			Product	Applic Rate	Width			Block	Treat
3420 MP 0.00-0.20	T-815-F12-1	EX	AI		4 ft R&L								
3420 MP 0.20-6.30		EX	AI	B	4 ft R&L	630 CY Grading C							
3420-111 MP 1.00	T-835-F12-2	EX	AI	A	4 ft R&L	100 CY Grading A				W B		P	P
3420-114 MP 0.20	T-835-F12-1 T-833-F12-1	EX	AI	A	4 ft R&L	50 CY Grading A				W B		P	P
3420-126 MP 0.15	T-835-F12-1	EX	AI	A	4 ft R&L	10 CY Grading A				W B		P	P
Water bars*						140 CY Grading Q							

*Waterbar rock is included to patch over bladed out existing water bars

1/ All materials incorporated into work from Purchaser provided sources will be "weed free". The Contracting Officer may request written confirmation of methods utilized to insure weed-free status.

ROAD MAINTENANCE REQUIREMENTS SPECIFICATION CODES TABLE PURSUANT TO
C5.31# - ROAD MAINTENANCE REQUIREMENTS (7/01)

Column No.	Heading	Entry	Explanation
	Any	Blank	Except as otherwise described, no entry indicates Purchaser is not authorized or required to perform the work item(s).
	Any	RC	This work requirement applies only when haul of sale related construction materials occurs.
2	Special Project Specification	Number	Entry indicates Special Project Specification which applies.
3	Travel Way	EX Numbers IS, C, OS, F, or AI A or B	Purchaser shall maintain the traveled way to the width existing upon entry, or at the completion of Specified Road work. Purchaser shall maintain the traveled way to the standard width indicated by the entry, plus curve widening, in accordance with Section T-811. If required, the road template shall be shaped to this width and to the designated cross slope before haul and during recurring maintenance. Cross slopes are designated as: IS (Inslope), C (Crown), OS (Outslope), F (Flat), AI (As Is). If compaction is required.
4	Brush and Log Out	Numeric & R and or L As Staked OPT H	Purchaser shall remove brush for specified width on either or both the right (R) side or left (L) side of road. Limits of brushing are as staked or marked in the field. Purchaser may use hand or mechanical means of brushing. Only hand brushing may be used.
5	Surfacing	Aggregate Grading D	Purchaser shall place surfacing on roads listed according to the grading indicated. Contractor is to make deposits for listed road maintenance, including surface rock replacement.
6	Dust Abatement	OPT Product Abbr. EX Numbers	Product selection is Purchaser's choice from those listed in Section T-812. Unless otherwise agreed, Purchaser is restricted to product listed corresponding to the abbreviation shown in Section T-812; (i.e., LigS = Lignon Sulfonate) Application rates are estimated amounts. Purchaser shall abate dust on the existing width Purchaser shall abate dust to the width indicated by entry.
7	Seasonal Maintenance	W B	Waterbars and/or crossditching shall be required prior to expected seasonal precipitation. Entrance barriers shall be installed by Purchaser prior to nonuse periods.
8	Snow Removal	TS JU Blank	Snowplowing authorized for Purchaser's Operations without recreation access being provided per Section T-803 requirements. Snowplowing authorized, but must provide for recreation joint use per Section T-803 requirements. Snowplowing is not authorized. Forest Service may authorize plowing by permit when not in conflict with other uses.
9	Post Haul	P	P denotes that work is Purchaser's Responsibility to perform.

SCHEDULE PURSUANT TO C6.315# - SALE OPERATION SCHEDULE (06/1994)

Subdivision	Operating Conditions	Purpose
All Portions of R/W**	Hourly Restrictions: All operations, except haul , that are within 100 yards of mature or old growth forest* and involve use of heavy equipment or power-tools (such as chainsaws) shall be restricted between April 1 and September 15 to two hours after sunrise to two hours before sunset.	<u>1/</u>
R/W	All ditch clean-out or brushing with <u>ground disturbing equipment</u> , such as an excavator, shall be restricted to July 1 through October 15.	<u>2/</u>
All	Installing and removing in-stream culverts shall be restricted to July 1 through August 31.	<u>2/</u>
All	All road brushing on system roads not subject to T-836, T-838, or T-839 in C5.31# shall be restricted to June 1 through September 15.	<u>3/</u>
All	Road Construction/Reconstruction (including Temporary Roads) and landing construction shall be restricted to July 1 through October 15.	<u>2/</u>
1,2	Date Restriction: Felling and yarding and machine piling within 100 yards of mature or old growth forest* shall be restricted to August 6 through March 31.	<u>1/</u>
	Haul-Move-in/out: no restrictions except landing A of subdivision 2 which shall be restricted to June 15 through October 15..	<u>2/</u>
3,4,8	Haul-Move-in/out: shall be restricted to June 15 to October 15.	<u>2/</u>
5,6	Haul-Move-in/out: shall be restricted to June 15 to October 15 along road 3420114, no restrictions along road 3420.	<u>2/</u>
7	Haul-Move-in/out: shall be restricted to June 15 to October 15 for landings B, D, E, F and H, no restrictions for landings A, C, I and G.	<u>2/</u>
Ground-based portions of 3,7,8	Ground-based felling, yarding and machine piling shall be restricted to June 15 through October 15	<u>2/</u>

* See attached map for subdivisions or portions of subdivisions that fall approximately within the 100 yards of mature or old growth forest (restricted areas).

** Portions of roads (R/W) that are in or along the subdivision restricted areas will be restricted for any road work involving use of heavy equipment or power-tools.

1/ To minimize disturbance to Marbled Murrelets or Spotted owls during the nesting season.

2/ To minimize streamcourse sedimentation due to wet weather operations.

3/ To maximize the effectiveness of brushing along the haul route.

MAP OF RESTRICTED AREAS PURSUANT TO C6.315# - SALE OPERATION SCHEDULE (06/1994)

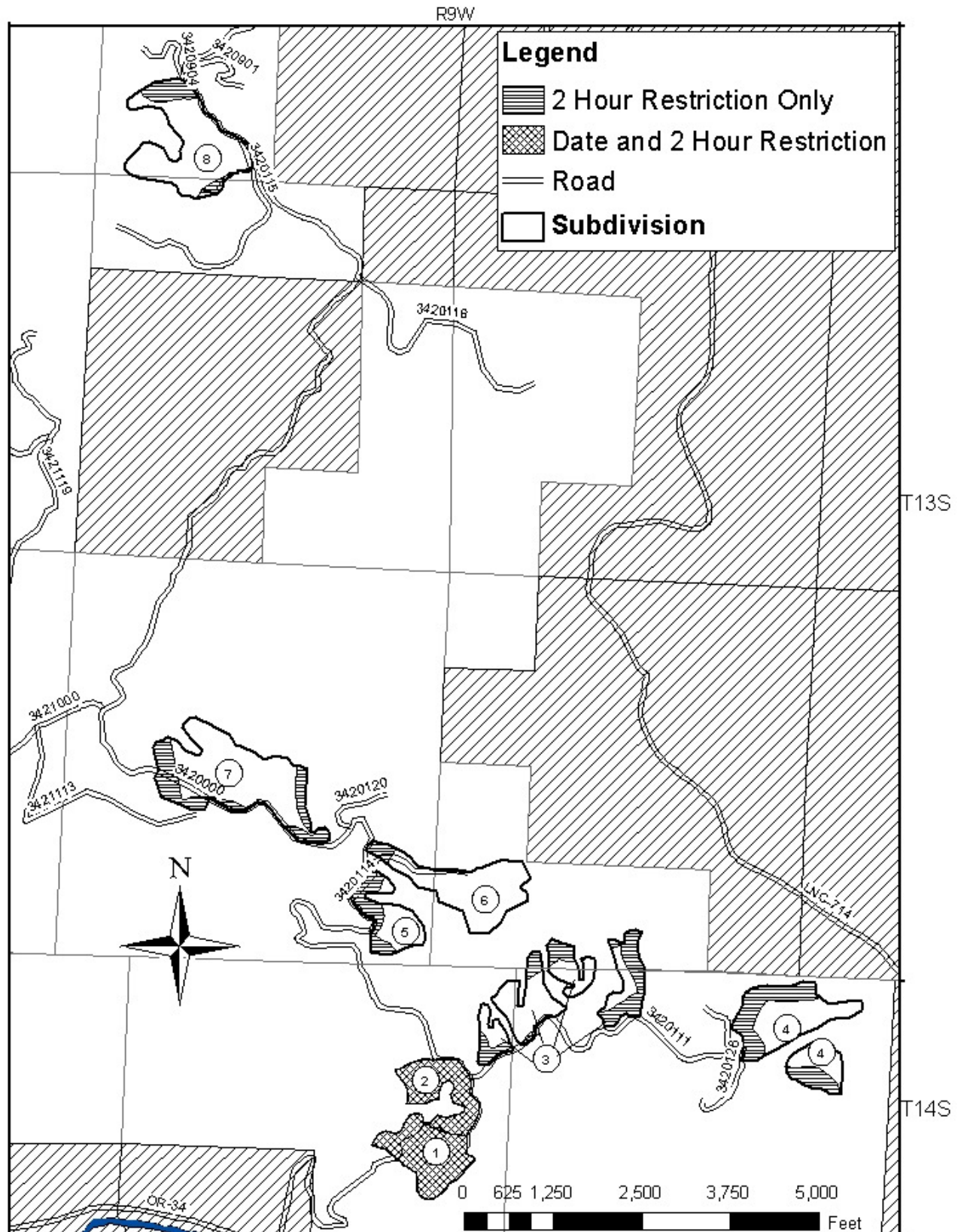


TABLE PURSUANT TO C6.41# - SPECIFIC REQUIREMENTS (01/2000)FELLING METHODSSUBDIVISIONS

Trees shall be felled away from paved roads, private property, Streamcourses, buffers, and leave areas, and to the lead of cable corridors and ground-based skid roads. Any tree that falls in a Streamcourse or a buffer shall be left in place unless otherwise approved by the Forest Service for removal.

All

FELLING EQUIPMENTSUBDIVISIONS

Mechanical felling machinery may be used on portions of subdivisions where Ground-based yarding is specified, or otherwise use chainsaw and wedges. If purchaser elects to use mechanical felling machinery pre-marking of cut or leave trees with Forest Service approved cut/leave colors may be required at the discretion of the sale administrator.

All

TABLE PURSUANT TO C6.42# - YARDING/SKIDDING REQUIREMENTS (04/2003)

YARDING/SKIDDING REQUIREMENTS	SUBDIVISIONS
<p>A skyline system capable of:</p> <ul style="list-style-type: none"> • transporting logs at least 1300 feet (rigging length of up to 1810 feet) • keeping one end of the log suspended during inhaul (logs may drag on the ground within 100 feet slope distance of tailholds and 50 feet slope distance of landings) • lateral yarding up to 120 feet • downhill yarding • operating in a multispans configuration • keeping the entire length of logs fully suspended above the ground 50 feet each side of the streamcourse during inhaul when yarding across streamcourses <p>Skyline corridors/cableways:</p> <ul style="list-style-type: none"> • location shall be approved in advance of felling operations • minimum spacing shall be 120 feet at the far end • maximum width of 12 feet • no more than 20 percent of the canopy would be removed in any given 1,000-foot reach of stream when passing through riparian buffers. <p>A carriage capable of:</p> <ul style="list-style-type: none"> • maintaining a fixed position on the skyline while lateral yarding • lateral yarding up to 120 feet on either side of the skyline • passing support jacks where intermediate supports are used. 	All
<p>A ground-base machine capable of keeping one end of the log suspended during skidding.</p> <p>Skid trails:</p> <ul style="list-style-type: none"> • location of skid trails shall be agreed upon prior to construction and prior to felling • maximum width of 15 feet except for turnaround areas • average trail spacing of 100 feet <p>The ground-base machine will not be allowed on slopes greater than 30 percent. Where practical, machine shall travel on slash.</p>	Portions of 3, 7, 8
<p>If purchaser chooses to tailhold on private land or land under other ownership, purchaser will have to get written permission from the landowner and provide the Forest Service with a copy of the written permission.</p>	4, 6
<p>Prior to yarding, Forest Service shall approve included timber pursuant to C2.35# (Option 1). If pre-marking by purchaser is required pursuant to C6.41# Forest Service shall approve marked trees prior to mechanical felling.</p>	All
<p>The tops shall be severed or broken off from at least 20 percent of the felled trees prior to yarding. These severed or broken tops shall be left on site (not yarded or removed) scattered over 80 percent of the cutting subdivision. A top is defined as that portion of the tree 6.0 inches DIB or smaller on the large end.</p>	All

APPLICATION SCHEDULE PURSUANT TO C6.6# - EROSION CONTROL AND SOIL TREATMENT BY PURCHASER
(07/2001)

	AREAS	SEED		FERTILIZER		MULCH	
SUBDIVISION OR SUBDIVISION NUMBER	A) SKID TRAILS B) FIRELINES C) TEMP. ROADS D) LANDINGS E) OTHER	APPLICATION		APPLICATION		APPLICATION	
		SPECIES MIXTURE	LBS/AC	TYPE	LBS/AC	TYPE	LBS/AC
All	A, C, D	<u>1</u> /	22	None		None	

1/ Blue Wild Rye grass seed will be provided by the Forest Service. A co-op deposit of \$0.06/Ton will be collected to cover the cost of the seed.

SPECIFICATIONS PURSUANT TO C6.74# - SLASH TREATMENTS REQUIREMENTS (02/2002)

CONSTRUCTION SLASH. Unless otherwise agreed, all slash as defined in C6.7 - Slash Disposal shall be treated.

SPECIFIC DISPOSAL METHOD. Purchaser shall pile or scatter all construction slash. Scattering of construction slash shall be outside the Temporary Road clearing limits without damaging trees. All logs shall be limbed. Logs and stumps shall be placed away from trees, positioned so they will not roll, and not be placed on top of one another. Piling of construction slash shall be in accordance with Machine Pile Landings 2-Method of Treatment and 3-Location of Piles below.

In no event will Construction Slash be buried under Temporary Road or landing embankments.

MACHINE PILE/SCATTER LANDINGS

1. AREA SUBJECT TO THIS PROVISION. All landings and the area within 30 feet of the perimeter of these landings shall be machine piled.
2. METHOD OF TREATMENT. Unless otherwise agreed, all slash as defined in C6.7 - Slash Disposal shall be treated as per Method a, Method b, or Method c below, or a combination thereof, at the discretion of the sale administrator.
 - Method a:** All slash other than those specified pieces described in Method b below shall be placed in a compact, dirt free, uniform pile for later disposal by the Forest Service. The pieces shall be placed so that shifting or rolling will not occur and so that no material will extend over the edge of disposal areas. Piles shall be no higher than 15 feet.
 - Method b:** All pieces meeting non-saw specifications and longer than 10 feet shall be placed in a separate pile(s). The pieces in the pile shall be placed parallel to each other similar to log decks, and placed where shifting and rolling will not occur. Unless otherwise agreed, these piles shall be no higher than 6 feet.
 - Method c:** All slash other than that described above in Method b shall be scattered across landings, Temporary Roads, skyline corridors, or other openings in the immediate area, as designated by Forest Service Contract Inspector. Scattering shall be accomplished in a manner to avoid windrows or piling and shall not exceed a depth of 1 foot from natural forest floor or road/landing surface.
3. LOCATION OF PILES.
 - a. Piles as defined in Method a above, shall be located in the center of openings near or on the landings and as far as possible away from residual trees. Unless otherwise agreed, the base of the piles shall be no closer than 10 feet from standing trees. Excess slash which cannot be piled as per these specifications, will be required to be hauled to a disposal site as designated by the Forest Service.
 - b. Piles as defined in Method b above, shall be located in agreed upon openings near the landing area adjacent to the road system and be located at least 10 feet away from the pile as defined in a Location of Piles "a" above. These piles can be placed adjacent to standing trees.
4. TIMING OF PILES. Piling of slash shall be done concurrent with yarding on each landing, or within 10 days of completion of yarding on each landing.

SPECIFICATIONS PURSUANT TO C6.74# - SLASH TREATMENTS REQUIREMENTS (02/2002)

5. COVERING PILES. During the construction of each pile, a 100 sq ft (10'x10') piece of 4 ml polyethylene plastic shall be placed on top of the pile when the pile is 2/3 of the way built. The remaining 1/3 of the slash shall be placed on top of the plastic. Kraft-waterproof paper or other similar product may be substituted for the 4 ml plastic.
6. Pursuant to C6.7 the following rate will be used to determine charges for measures mentioned above that are waived or taken over by Forest Service: \$193.75/Pile to machine pile landings, \$43.75/Pile to cover machine pile

SCATTER SLASH ALONG ROADS

1. SLASH SPECIFICATION. Unless otherwise agreed, all logging slash more than 2 feet long and less than 3 inches in diameter shall be scattered. Larger material which has a portion larger than 3 inches in diameter, must be limbed, and bucked at 3 inches in diameter, with the resulting slash meeting the above specification requiring scattering.
2. AREA SUBJECT TO THIS PROVISION. Slash inside Cutting Subdivisions 1, 2, 7 and 8 that is within 25 feet slope distance of Road 3420 meeting above specification shall be scattered, away from the road, within the subdivision and outside of this area.
3. METHOD OF TREATMENT. Unless otherwise agreed, slash meeting the above slash specification shall be hand or machine scattered or incorporated into the landing piles. Any machine used for scattering shall remain on the running surface of the road at all times. Slash shall not be windrowed or piled (unless added to the landing pile). The scattered slash shall be no more than one-foot in depth, measured from mineral soil.
4. TIMING OF PILES. Scattering of slash shall be done concurrent with yarding in the unisubdivision, or within 10 days of completion of yarding.
5. Pursuant to C6.7 the following rate will be used to determine charges for measures mentioned above that are waived or taken over by Forest Service: \$559.00/acre to scatter slash.